

## R E M A R K S

Claims 1, 2 and 15-27 are now in this Application, and are presented for the Examiner's consideration.

### Prior Filed Information Disclosure Statement

The Examiner states that the prior filed Information Disclosure Statement does not comply with the rules because it does not include a concise explanation of the references. However, it is merely necessary to provide an English-language translation of a foreign Search Report which discusses the relevance of the references. An English language translation of the relevant portions of the German Patent Office search report was filed with the Information Disclosure Statement, which was filed with the Missing Parts of the application. A copy of this English language translation, that was previously filed, is enclosed herewith for the Examiner's convenience.

Although the English language translation of the search report did not list any claims to which the references were related, the translation of the German Patent office search report did indicate that ALL of the cited references were in category "A" which is defined as part of the technological background. Therefore, the search report indicated that the references were not specifically relevant at all to the invention, but merely disclosing the general state of the art.

According to MPEP Section 609, "where the information listed is not in the English language, but was cited in a search report or other action by a foreign patent office in a counterpart foreign application, the requirement for a concise explanation of relevance can be satisfied by submitting an English-language version of the search report or action which indicates the degree of relevance found by the foreign office. This may be an explanation of which portion of the reference is particularly relevant, to which claims it applies, or merely an "X", "Y", or "A" indication on a search report" (emphasis added).

This is exactly the case here where the English language version of the search report in the corresponding German application provided an indication "A" for each reference.

It is therefore submitted that, according to MPEP Section 609, applicant previously satisfied its requirement for a concise explanation, and the Examiner is requested to enter and consider the references in the Information Disclosure Statement, WITHOUT ANY FEES DUE BY THE APPLICANT.

However, as a courtesy to the Examiner, the relevance of each of the references cited in the Information Disclosure Statement filed with the application will now be provided.

CH 421 494: This document describes a method of production of plastic foam panels. As an example, a lattice mat of a plastic wire 1,2 is fabricated (Figs. 1 to 3) and is put into a mold

which is filled with pellets. The mold is then heated. resulting in foam embedding the plastic wires.

DE 36 12 576: This document describes an electrical device having a plastic shell 29 and a method for producing the same. Conductor pads 2,3,4,5 which are connected by bridges 14 (Fig. 1) are partially embedded in plastic 16, 18 (Fig. 3) to fix their relative positions. Then, the bridges 14 are cut, and a second molding process takes place.

DE 10 45 640: This document describes an injection mold having two parts and which is adapted to inject plastic material in such a way that a bendable insert which is embedded in the mold is prevented from being deformed. The bendable insert can be a plurality of wires for a relay.

EP 04 68 164 A2 and A3: This document describes a method and apparatus for injection molding around metal parts. The metal parts have preformed cut positions 26. The method focuses on the correct positioning of the metal parts in the mold so that they can be broken at the cut positions 26.

JP 62-092817: This document includes an abstract in the English language which describes the same and further provides a concise explanation.

In view of the above, the Examiner is requested to enter and consider these references.

Further, since a concise explanation according to MPEP Section 609 in the form of an English translation of the corresponding German Patent Office search report was earlier provided, NO ADDITIONAL FEE IS REQUIRED.

Additional Information Disclosure Statement

The Applicant and those individuals involved in the preparation and/or prosecution of the above-identified Application have become aware of the following references which the Examiner may consider material to the patentability of the above-identified Application:

<u>U.S. PATENT NO.</u>	<u>PATENTEE</u>	<u>DATE</u>
5,700,057	DE FILIPPO	12/23/1997
3,264,034	LAWSON	08/02/1966
3,860,287	PLATT	01/14/1975
5,769,491	SCHWARZBICH	06/23/1998
5,165,754	LOUYS	11/24/1992

<u>PATENT NO.</u>	<u>COUNTRY</u>	<u>DATE</u>
0 780 262	EPO	06/25/1997
2 532 883	FRANCE	03/16/1984
2 534 792	FRANCE	04/27/1984
2 726 334	FRANCE	05/03/1996

<u>PATENT NO.</u>	<u>COUNTRY</u>	<u>DATE</u>
2 759 649	FRANCE	08/21/1998
WO 01/10670	PCT	02/15/2001

Copies of the above references are enclosed.

Also enclosed is a copy of a Search Report from the European Patent Office in the corresponding European patent application which discusses the above references, and an English-language translation thereof. This satisfies the requirement for a concise explanation.

In addition, one PTO/SB/08A Form is enclosed, which lists the above references. It is requested that the Examiner initial this Form and return a copy thereof to the undersigned.

#### Certification

Each item of information contained in this Information Disclosure Statement was cited in a Communication from a foreign patent office (European Patent Office) in a related foreign application for the same applicant, not more than three months prior to the filing of this Information Disclosure Statement. The date of mailing of the Communication from the European Search Report was December 16, 2004, which is not more than three months prior to the filing of this Information Disclosure Statement. Therefore, the filing of this Information Disclosure Statement is

timely under the provisions of 37 C.F.R. 1.97(c) (1) and 1.97(e) (1) .

Accordingly, under 37 C.F.R. 1.97, no fee is required for this Information Disclosure Statement.

It is requested that the above-identified references be made of record in the present application.

#### Objection to Abstract

In regard to the objection to the Abstract, "(Fig. 1)" in the last line has been deleted, as suggested by the Examiner.

Accordingly, it is submitted that the objection to the Abstract has been overcome.

#### Allowable Subject Matter

Claims 20-23 and 25 were indicated as containing allowable subject matter, and would be allowed if rewritten in independent form.

However, it is submitted that, in view of the amendments and arguments herein, claims 1 and 26, and the dependent claims which depend therefrom, are now in condition for allowance.

#### Prior Art Rejections

Before discussing the prior art rejections, it is noted that only claims 1, 2, 18, 19 and 26 were specifically rejected on the

basis of prior art.

In paragraph number 7 which recites the specific rejection of claims 1, 2 and 26 under 35 U.S.C. §103(a), there is a discussion as to claims 15, 17 and 24, but these claims were not specifically rejected. Further, there is no mention anywhere of any prior art rejection of claim 16.

Claims 1, 2 and 26 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,722,821 to Vermilye.

Vermilye was cited to verify that a method is known "of introducing a skeletal frame 50 comprising rods 70 for a supporting element 100 into an injection mold and embedding the rods in the supporting element during injection molding of the supporting elements, the rods being encapsulated by molding with plastic of the supporting element". Here, vanes 100 of a cascade basket are identified with a supporting element.

However, claim 1 is limited to producing a lordosis support of a vehicle seat. The lordosis support is part of a vehicle seat, the lattice mat being placed in the frame of the backrest of the seat. See page 1 the middle paragraph of the present specification. This is very different from a method of making a cascade basket for a thrust reverser, as in Vermilye.

It was stated that the preamble of claim 1 has not been accorded any patentable weight. However, limitations of the

preamble are meant to be a restrictive part of the claim.

In this regard, the limitations of the preamble have been incorporated into the main body of claim 1 as method steps. Specifically, the step of introducing has been expanded to specifically recite the same in the context of a lordosis support by reciting the step of "introducing longitudinal and transverse rods of a lattice mat into an injection mold for a supporting element of a lordosis support." Therefore, claim 1 is no longer merely limited to introducing rods into an injection mold, but rather, introduces both longitudinal and transverse rods of a lattice mat into the injection mold, and not just any injection mold, but rather, an injection mold for a supporting element of a lordosis support.

In addition, the second step has been modified to specifically recite the step of "forming the supporting element of the lordosis support with an adjustable curvature." This step further recites that this second step of forming the supporting element of the lordosis support occurs by the sub-step of embedding the rods in the supporting element during injection molding of the supporting element of the lordosis support.

In this regard, the limitations of the preamble have been added as specific method steps in the main body of claim 1.

It is noted that, although the lattice mat is formed by longitudinal and transverse rods, not all of these rods are



necessarily embedded in the supporting element in the second step of the method of claim 1. This is disclosed at page 3, lines 12-13 of the present specification, where it is stated: "The injection mold can also be used to hold those transverse rods in position, which are not embedded in the supporting element."

Vermilye fails to disclose or even remotely suggest either of the steps of claim 1 relating to a lordosis support.

If the Examiner is of a different opinion, the Examiner is requested to specifically show wherein Vermilye there is support for a contrary opinion.

Claim 26 has been amended in an analogous manner to claim 1. Claim 26 relates to the formation of an initiating element for active head supports of a vehicle seat, for which a functioning part of plastic is fastened to rods of a lattice mat. In this regard, claim 26 has been amended to recite the steps of:

introducing longitudinal and transverse rods of a lattice mat into an injection mold for a functioning part of an initiating element for an active head support, and

forming the initiating element for the active head support by the step of embedding the rods in the functioning part during injection molding of the functioning part of the initiating element for the active head support.

For the same reasons given as to claim 1, Vermilye fails to disclose or even remotely suggest either of the steps of claim 26

relating to formation of an initiating element for active head supports of a vehicle seat.

Accordingly, it is respectfully submitted that the rejection of claims 1, 2 and 26 under 35 U.S.C. §102(b) has been overcome.

Claims 1, 2 and 26 were further rejected under 35 U.S.C. §103(a) as being obvious from U.S. Patent No. 5,769,491 to Schwarzbich in view of Vermilye or U.S. Patent No. 5,609,652 to Yamada et al.

The remarks previously made in regard to Vermilye are incorporated herein.

Schwarzbich merely discloses a lordosis support with a supporting element of plastic which is clamped to transverse rods of a lattice mat which is formed by longitudinal and transverse rods. The Examiner acknowledges that Schwarzbich fails to disclose molding of the supporting elements on the rods of the lattice support.

For this reason, Vermilye and Yamada et al were cited for disclosing in a general context the molding of plastic parts on a metal frame, albeit having no relation to lordosis supports.

Thus, none of the prior art references cited by the Examiner which relate to lordosis supports, suggest using a method of embedding longitudinal and transverse rods in the supporting element during injection molding of the supporting element.

Since the snap fastening or clamping method of Schwarzbich allowed the transverse rod to bend between the two positions at which it is connected to the supporting element, almost the full length of the rod can flexibly adapt to different loads. In view of the same, it would not have been obvious to give up this feature in favor of embedding the rod in the supporting element during injection molding. With the present claimed invention, since the rods are embedded in the supporting element, or even encapsulated by molding with the plastic of the supporting element (claim 2), the bending of the rods is confined to a small degree or is even completely inhibited in the embedded or encapsulated area of the rod. It is therefore submitted that one skilled in the art would not have believed that this limitation was acceptable or that it would lead to adequate strength of the connection which has to take loads from the elastic bending of the supporting element. In fact, this provides a teaching away from the present invention, since one skilled in the art would not look to give us these advantages of the prior art.

The method of snap fastening or clamping the supporting element of a lordosis support to the lattice mat, as taught by Schwarzbich, has been a well established method. In the prior art, the lattice mat and the supporting element of a lordosis support are produced separately, and afterwards they are connected.

However, pursuant to the present invention, the production of the supporting element and its fastening to the lattice mat are advantageously integrated into a single step, so that the number of working and handling processes is reduced. See page 2, fourth paragraph of the present specification. It is even possible to further simplify the production by connecting the transverse rods of the lattice mat with the longitudinal rods during the injection molding, as per claims 17 and 24. The injection mold can also be used to hold those transverse rods in position, which are not embedded in the supporting element. See page 3, second paragraph of the description. These advantages of the invention would not be obvious from the cited references.

Further, the invention is not merely a combination of a method of producing a lordosis support known from the prior art with a method of embedding rods in an injection mold during injection molding of an element, because the advantages go far beyond what could have been expected from such a combination. The method does not only effect a special kind of connection of the supporting element to the transverse rods of the lattice mat, but the invention has the advantages of simplifying the manufacturing and fastening of the lordosis support to the lattice mat, and also allows a simplified and time saving manufacturing of the lattice mat.

One important example of this is that the cooling time between the injection of the plastic and the removing of the supporting element can be used for other production steps, especially for fastening the transverse rods to the longitudinal rods. See page 3, third paragraph of the present specification.

To summarize, it is submitted that it would not have been obvious to combine the cited documents, and that the invention has important advantages which would not have been obtained by simply combining the cited documents.

The same remarks apply equally to claim 26 which includes analogous limitations to claim 1.

Accordingly, it is respectfully submitted that the rejection of claims 1, 2 and 26 under 35 U.S.C. §103(a) has been overcome.

Claim 18 was rejected under 35 U.S.C. §103(a) as being obvious from Schwarzbich/Vermilye/Yamada et al as applied above, and further in view of Japanese Patent Publication No. JP 62-92817 to Hosoi.

The remarks previously made above in regard to Schwarzbich, Vermilye and Yamada et al are incorporated herein.

In the first place, Hosoi fails to cure the aforementioned deficiencies of Schwarzbich, Vermilye and Yamada et al, as discussed above.

Hosoi does not teach introducing part 11 in a continuous length in the mold. As can be seen from Fig. 1 and as described in the abstract, an insert plate 13 having inserts 12 extending from it is inserted in a resin molder. Figure 1 clearly shows that an insert 12 lies behind the plane of the drawing, whereas the base 11 extends perpendicular to the plane of the drawing. As described in the abstract, a cutter 25 descends so as to cut the base 11 of inserts 12 at the edge 11a. Obviously, base 11 has many inserts 12 extending from it. Therefore, the inserts 12 are not straight rod endless material, as recited in claim 18. None of the other cited references disclose or suggest this limitation.

Accordingly, it is respectfully submitted that the rejection of claim 18 under 35 U.S.C. §103(a) has been overcome.

Claim 19 was rejected under 35 U.S.C. §103(a) as being obvious from Schwarzbich/Vermilye/Yamada et al/Hosoi as applied above, and further in view of Japanese Patent Publication No. JP 01-214417.

The remarks previously made above in regard to Schwarzbich, Vermilye, Yamada et al and Hosoi are incorporated herein.

However, JP 01-214417 fails to cure the aforementioned deficiencies of Schwarzbich, Vermilye, Yamada et al and Hosoi, as discussed above, and for the same reasons, it is submitted that

claim 19 distinguishes from these references.

Accordingly, it is respectfully submitted that the rejection of claim 19 under 35 U.S.C. §103(a) has been overcome.

In regard to the latter rejection of claim 19, a new claim 27 has been added, which depends from claim 19, and which recites that, after the longitudinal rods are bent, they are not moved in longitudinal direction before the injection molding of the supporting element. On the other hand, in JP 01-214417, an endless rod is moved in stages through the mold and is bent in a first stage, then moved to a second stage and encapsulated there. See Figs. 1 to 3.

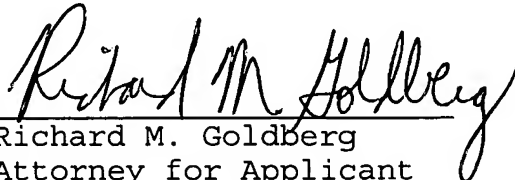
If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

In the event that this Paper is late filed, and the necessary petition for extension of time is not filed concurrently herewith, please consider this as a Petition for the requisite extension of time, and to the extent not tendered by check attached hereto, authorization to charge the extension fee, or any other fee required in connection with this Paper, to Account No. 07-1524.

The Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 07-1524.

In view of the foregoing amendments and remarks, it is respectfully submitted that Claims 1, 2 and 15-27 are allowable, and early and favorable consideration thereof is solicited.

Respectfully submitted,

  
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One Form PTO/SB/08A, eleven (11) references and Search Report from the European Patent Office in the corresponding European patent application and English language translation thereof